Page 101 of 133 –Federal Implementation Plan for Managing Emissions from Oil and Natural Gas Sources on the Indian Country Lands Within the Uintah and Ouray Indian Reservation in Utah

# List of Subjects in 40 CFR Part 49

Environmental protection, Administrative practice and procedure, Air pollution control, Indians, Indians-law, Indians-tribal government, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated:	
<del></del>	Douglas H. Benevento Gregory Sopkin,
	Regional Administrator,
	Region 8.

For reasons set forth in the preamble, part 49 of Title 40 of the Code of Federal Regulations is proposed to be amended as follows:

PART 49--INDIAN COUNTRY: AIR QUALITY PLANNING AND

**MANAGEMENT** 

1. The authority citation for part 49 continues to read as follows:

Authority: 42 U.S.C. 7401, et seq.

Subpart K-Implementation Plans for Tribes-Region VIII

2. Add the undesignated center heading "Federal Implementation Plan for Managing

Emissions from Oil and Natural Gas Sources on the Indian Country Lands Within the

Uintah and Ouray Indian Reservation in Utah" and §§ 49.4169 through 49.4185 to read

as follows:

Federal Implementation Plan for Managing Emissions from Oil and Natural Gas

Sources on the Indian Country Lands Within the Uintah and Ouray Indian

Reservation in Utah

49.4169 Introduction.

49.4170 Delegation of authority of administration to the tribe.

49.4171 General provisions.

49.4172 Emissions inventory.

49.4173 Nonattainment requirements for new or modified true minor oil and natural gas

sources.

Page 2 of 37

- \*\*\* Draft document prepared for 9/5/19 intergovernmental technical discussion between the Ute Tribe Air Quality Program Director and EPA Region 8\*\*\*
- 49.4174 VOC emissions control requirements for storage tanks.
- 49.4175 VOC emissions control requirements for dehydrators.
- 49.4176 VOC emissions control requirements for pneumatic pumps.
- 49.4177 VOC emissions control requirements for covers and closed-vent system.
- 49.4178 VOC emissions control devices.
- 49.4179 VOC emissions control requirements for fugitive emissions.
- 49.4180 VOC emissions control requirements for tank truck loading.
- 49.4181 VOC emissions control requirements for pneumatic controllers.
- 49.4182 Other combustion devices.
- 49.4183 Monitoring requirements.
- 49.4184 Recordkeeping requirements.
- 49.4185 Notification and reporting requirements.

#### § 49.4169 Introduction.

(a) What is the purpose of §§ 49.4169 through 49.4185? Sections 49.4169 through 49.4185 establish legally and practicably enforceable requirements for oil and natural gas sources to address ozone air quality. Section 49.4170 establishes provisions for delegation of authority to allow the Ute Indian Tribe to assist the EPA with administration of this proposed U&O FIP. Section 49.4171 contains general provisions and definitions applicable to oil and natural gas sources. Section 49.4173 establishes legally and practicably enforceable requirements to control and reduce emissions of volatile organic compounds (VOC), nitrogen oxides, sulfur dioxide, particulate matter

(PM, PM<sub>10</sub> and PM<sub>2.5</sub>), hydrogen sulfide, carbon monoxide and various sulfur compounds from new and modified true minor oil and natural gas sources in the oil and natural gas production and natural gas processing segments of the oil and natural gas sector that are located on portions of the U&O Reservation that are included in the Uinta Basin ozone nonattainment area and commence construction on or after [30 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER, unless the source obtains a site-specific construction permit, or is otherwise required to obtain a site-specific permit by the Reviewing Authority, in accordance with 40 CFR 49.151 through 49.161. Sections 49.4174 through 49.4185 establish legally and practicably enforceable requirements to control and reduce VOC emissions from oil and natural gas well production and storage operations, natural gas processing, and gathering and boosting operations at oil and natural gas sources (as defined in § 49.4171(b)) that are located on Indian country lands within the U&O Reservation. (b) Am I subject to §§ 49.4169 through 49.4185? Sections 49.4169 through 49.4185, as appropriate, apply to each owner or operator of an oil and natural gas source located on Indian country lands within the U&O Reservation that has equipment or activities that meet the applicability thresholds specified in each section. Generally, the equipment and activities at oil and natural gas sources that are already subject to and in compliance with VOC emission control requirements under another EPA standard or other federally enforceable requirement, as specified in each appropriate subsection later, are considered to be in compliance with the requirements to control VOC emissions from that same

\*\*\* Draft document prepared for 9/5/19 intergovernmental technical discussion between the Ute Tribe Air Quality Program Director and EPA Region 8\*\*\* equipment under this proposed U&O FIP.

(c) When must I comply with §§ 49.4169 through 49.4185? Compliance with §§ 49.4169 through 49.4171 and 49.4174 through 49.4185, as applicable, is required no later than DATE 18 MONTHS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER] for oil and natural gas sources that commence construction before [DATE OF PUBLICATION OF THE FINAL RULE IN THE **FEDERAL REGISTER**]. You may submit a written request to the EPA for an extension of the compliance date for existing sources that describes the specific reasons for the requested extension. Any decision to approve or deny the request, including the length of time of an approved request, will be based on the determined merits of case-specific circumstances. Compliance with §§ 49.4169 through 49.4171 and 49.4174 through 49.4185, as applicable, is required upon startup for oil and natural gas sources that commence construction on or after [DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]. Compliance with § 49.4173 is required upon commencing construction of any new and modified true minor oil and natural gas source in the oil and natural gas production and natural gas processing segments of the oil and natural gas sector that is located on portions of the U&O Reservation that are included in the Uinta Basin ozone nonattainment area that commences construction on or after [30] DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER].

§ 49.4170 Delegation of authority of administration to the tribe.

- \*\*\* Draft document prepared for 9/5/19 intergovernmental technical discussion between the Ute Tribe Air Quality Program Director and EPA Region 8\*\*\*
- (a) What is the purpose of this section? The purpose of this section is to establish the process by which the Regional Administrator may delegate to the Ute Indian Tribe the authority to assist the EPA with administration of this proposed U&O FIP. This section provides for administrative delegation and does not affect the eligibility criteria under 40 CFR 49.6 for treatment in the same manner as a state.
- (b) How does the Ute Indian Tribe request delegation? In order to be delegated authority to assist us with administration of this proposed U&O FIP, the authorized representative of the Ute Indian Tribe must submit a written request to the Regional Administrator that:
- (1) Identifies the specific provisions for which delegation is requested;
- (2) Includes a statement by the Ute Indian Tribe's legal counsel (or equivalent official) that includes the following information:
- (i) A statement that the Ute Indian Tribe is an Indian tribe recognized by the Secretary of the Interior;
- (ii) A descriptive statement that meets the requirements of § 49.7(a)(2) and demonstrates that the Ute Indian Tribe is currently carrying out substantial governmental duties and powers over a defined area;
- (iii) A description of the laws of the Ute Indian Tribe that provide adequate authority to carry out the aspects of the rule for which delegation is requested; and
- (3) Demonstrates that the Ute Indian Tribe has, or will have, adequate resources to carry out the aspects of the rule for which delegation is requested.

- \*\*\* Draft document prepared for 9/5/19 intergovernmental technical discussion between the Ute Tribe Air Quality Program Director and EPA Region 8\*\*\*
- (c) How is the delegation of administration accomplished? (1) A Delegation of Authority Agreement setting forth the terms and conditions of the delegation and specifying the provisions of this rule that the Ute Indian Tribe will be authorized to implement on behalf of the EPA will be entered into by the Regional Administrator and the Ute Indian Tribe. The Agreement will become effective upon the date that both the Regional Administrator and the authorized representative of the Ute Indian Tribe have signed the Agreement. Once the delegation becomes effective, the Ute Indian Tribe will be responsible, to the extent specified in the Agreement, for assisting us with administration of the FIP and will act as the Regional Administrator as that term is used in these regulations. Any Delegation of Authority Agreement will clarify the circumstances in which the term "Regional Administrator" found throughout the FIP is to remain the EPA Regional Administrator and when it is intended to refer to the "Ute Indian Tribe," instead. (2) A Delegation of Authority Agreement may be modified, amended, or revoked, in part or in whole, by the Regional Administrator after consultation with the Ute Indian Tribe. (d) How will any Delegation of Authority Agreement be publicized? The Agency will publish a notice in the Federal Register informing the public of any Delegation of Authority Agreement with the Ute Indian Tribe to assist us with administration of all or a portion of the FIP and identifying such delegation in the FIP. The Agency will also publish an announcement of the Delegation of Authority Agreement in local newspapers.

§ 49.4171 General provisions.

- \*\*\* Draft document prepared for 9/5/19 intergovernmental technical discussion between the Ute Tribe Air Quality Program Director and EPA Region 8\*\*\*
- (a) At all times, including periods of startup, shutdown, and malfunction, each owner or operator must, to the extent practicable, design, operate, and maintain all equipment used for hydrocarbon liquid and gas collection, storage, processing, and handling operations covered under §§ 49.4171 and 49.4174 through 49.4185, regardless of emissions rate and including associated air pollution control equipment, in a manner that is consistent with good air pollution control practices and that minimizes leakage of VOC emissions to the atmosphere.
- (b) *Definitions*. As used in §§ 49.4169 through 49.4185, all terms not defined herein have the meaning given them in the Act, in 40 CFR part 60, 40 CFR part 63, in the Prevention of Significant Deterioration regulations at 40 CFR 52.21, in the Federal Minor New Source Review Program in Indian Country at 40 CFR 49.151, or in the Federal Implementation Plan for Managing Air Emissions from True Minor Sources in Indian Country in the Oil and Natural Gas Production and Natural Gas Processing Segments of the Oil and Natural Gas Sector at 40 CFR 49.102. The following terms have the specific meanings given them:

Bottom filling means the filling of a tank through an inlet at or near the bottom of the tank designed to have the opening covered by the liquid after the pipe normally used to withdraw liquid can no longer withdraw any liquid.

Condensate means hydrocarbon liquid separated from produced natural gas that condenses due to changes in temperature, pressure, or both, and that remains liquid at standard conditions.

Crude oil means hydrocarbon liquids that are separated from well-extracted reservoir fluids during oil and natural gas production operations, and that are stored or injected to pipelines as a saleable product. Condensate is not considered crude oil.

Electronically controlled automatic ignition device means an electronic device which generates sparks across an electrode and reaches into a combustible gas stream traveling up a flare stack or entering an enclosed combustor, at the point of the pilot tip, equipped with a temperature monitor that signals the device to attempt to re-light an extinguished pilot flame.

Enclosed combustor means a thermal oxidation system with an enclosed combustion chamber that maintains a limited constant temperature by controlling fuel and combustion air.

Flashing losses means natural gas emissions resulting from the presence of dissolved natural gas in the crude oil, condensate, or produced water, which are under high pressure that occurs as the liquids are transferred to storage tanks that are at atmospheric pressure.

Fugitive emissions component means any component that has the potential to emit fugitive emissions of VOC at an oil and natural gas source, such as valves, connectors, pressure relief devices, open-ended lines, access doors, flanges, closed-vent systems, covers, thief hatches or other openings on a controlled storage vessel, compressors, instruments, and meters. Devices that vent as part of normal operations, such as natural gas-driven pneumatic controllers or natural gas-driven pumps, are not fugitive emissions components, insofar as the natural gas discharged from the device's vent is not

considered a fugitive emission. Emissions originating from other than the vent, such as the thief hatch on a controlled storage vessel, would be considered fugitive emissions.

Glycol dehydration unit process vent emissions means VOC-containing emissions from the glycol dehydration unit regenerator or still vent and the vent from the dehydration unit flash tank (if present).

Malfunction alarm and remote notification system means a system connected to an electronically controlled automatic ignition device that sends an alarm through a remote notification system to an owner or operator's central control center, if an attempt to relight the pilot flame is unsuccessful.

Pneumatic pump means a single diaphragm pump powered by pressurized natural gas.

Pneumatic pump emissions means the VOC-containing emissions from pressurized natural gas-driven pneumatic pumps.

Produced natural gas means natural gas that is separated from extracted reservoir fluids during oil and natural gas production operations.

Regional Administrator means the Regional Administrator of EPA Region 8 or an authorized representative of the Regional Administrator of EPA Region 8, except to the extent otherwise specifically specified in a Delegation of Authority Agreement between the Regional Administrator and the Ute Indian Tribe.

Standing and breathing losses means VOC emissions from fixed roof tanks as a result of evaporative losses during storage.

Storage tank means a tank or other vessel that contains an accumulation of crude oil, condensate, intermediate hydrocarbon liquids, or produced water, and that is constructed primarily of non-earthen materials (such as wood, concrete, steel, fiberglass, or plastic), which provide structural support.

Submerged fill pipe means any fill pipe with a discharge opening which is entirely submerged when the liquid level is six inches above the bottom of the tank and the pipe normally used to withdraw liquid from the tank can no longer withdraw any liquid.

Supervisory Control and Data Acquisition (SCADA) system generally refers to industrial control computer systems that monitor and control industrial infrastructure or source-based processes.

Unsafe to repair means (in the context of fugitive emissions monitoring) that operator personnel would be exposed to an imminent or potential danger as a consequence of the attempt to repair the leak during normal operation of the source.

Utility flare means a thermal oxidation system using an open (without enclosure) flame that is designed and operated in accordance with the requirements of 40 CFR 60.18(b). An enclosed combustor is not considered a utility flare. A combustion device is not considered a utility flare when installed horizontally or vertically within an open pit and often used in oil and natural gas operations to combust produced natural gas during initial well completion or temporarily during emergencies when enclosed combustors or utility flares installed at a source are not operational or injection of recovered produced natural gas is unavailable.

Visible smoke emissions mean air pollution generated by thermal oxidation in a flare or enclosed combustor and occurring immediately downstream of the flame present in those units. Visible smoke occurring within, but not downstream of, the flame, does constitute visible smoke emissions.

Working losses means natural gas emissions from fixed roof tanks resulting from evaporative losses during filling and emptying operations.

#### § 49.4172 Emissions inventory.

- (a) Applicability. The emissions inventory requirements of this section apply to each oil and natural gas source as identified in § 49.4169(b), and that has actual emissions of any pollutant identified in paragraph (c) of this section greater than or equal to one ton in any consecutive 12-month period.
- (b) Each oil and natural gas source shall submit an inventory for every third year, beginning with the 2017 calendar year, for all emission units at a source.
- (c) The inventory shall include the total emissions for PM<sub>10</sub>, PM<sub>2.5</sub>, oxides of sulfur, oxides of nitrogen, carbon monoxide and volatile organic compounds for each emissions unit at the source. Emissions for the emissions unit at the source shall be calculated using the emissions unit's actual operating hours, product rates and types of materials processed, stored or combusted during the calendar year of the reporting period.
- (d) The inventory shall include the type and efficiency of any air pollution control equipment present at the reporting source.

- \*\*\* Draft document prepared for 9/5/19 intergovernmental technical discussion between the Ute Tribe Air Quality Program Director and EPA Region 8\*\*\*
- (e) The inventory shall be submitted to the EPA Region 8 Office no later than April 15<sup>th</sup> of the year following each inventory year, except that the first inventory covering calendar year 2017 shall be submitted no later than October 1, 2018.
- (f) The inventory shall be submitted in an electronic format specific to this source category that is available on the EPA Region 8 Office website at <a href="https://www.epa.gov/air-quality-implementation-plans/approved-air-quality-implementation-plans-region-8">https://www.epa.gov/air-quality-implementation-plans/approved-air-quality-implementation-plans-region-8</a>.
- § 49.4173 Compliance with the National Indian Country Oil and Natural Gas

  Federal Implementation Plan for New and Modified True Minor Oil and Natural

  Gas Sources in the Uinta Basin Ozone Nonattainment Area.
- (a) Applicability. This section applies to each owner or operator of a new and modified true minor source in the oil and natural production and natural gas processing segments of the oil and natural gas source sector that is located on portions of the U&O Reservation that are included in the Uinta Basin ozone nonattainment area and that commences construction on or after [30 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]. Owners/operators of such sources shall comply with the requirements of the Federal Implementation Plan for Managing Air Emissions from True Minor Sources in Indian Country in the Oil and Natural Gas Production and Natural Gas Processing Segments of the Oil and Natural Gas Sector at 49.101 through 49.105, as applicable, except for § 49.101(b)(1)(v), and,

- \*\*\* Draft document prepared for 9/5/19 intergovernmental technical discussion between the Ute Tribe Air Quality Program Director and EPA Region 8\*\*\*
- applicable requirements of the Federal Minor New Source Review Program in Indian Country at 40 CFR 49.151 through 49.161.
- (b) Complying with the requirements of § 49.4173(a) does not relieve the owner/operator from the obligation to comply with the requirements of §§ 49.4169 through 49.4171 and 49.4174 through 49.4185, as applicable.

## § 49.4174 VOC emissions control requirements for storage tanks.

- (a) Applicability. The VOC emissions control requirements of this section apply to each crude oil, condensate, and/or produced water storage tank located at an oil and natural gas source as identified in § 49.4169(b) that meets the criteria in one of paragraphs (1) through (4):
- (1) At an oil and natural gas source that began operations before [30 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], the source-wide uncontrolled actual VOC emissions from all storage tanks, glycol dehydrators, and pneumatic pumps is equal to or greater than 4 tpy, as determined according to this section;
- (2) At an oil and natural gas source that began operations on or after [30 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], upon startup of operation, for a minimum of 12 consecutive calendar months; or
- (3) At an oil and natural gas source that began operations before [30 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL

**REGISTER**], with one or more storage tanks and no glycol dehydrators or pneumatic pumps, the source-wide throughput is equal to or greater than 8,000 barrels of crude oil or 2,000 barrels of condensate in any consecutive 12-month period

- (4) Modification to an oil and natural gas source shall require a re-evaluation of the source-wide VOC emissions from all storage tanks, glycol dehydrators and pneumatic pumps or the source-wide crude oil or condensate throughput.
- (b) Exemptions.
- (1) This section does not apply to crude oil, condensate, and/or produced water storage tanks located at an oil and natural gas source that are subject to the emissions control requirements for storage vessels in 40 CFR part 60, subparts OOOO or OOOOa, or 40 CFR part 63, subpart HH.
- (2) This section does not apply to an emergency storage tank located at an oil and natural gas source, if it meets the following requirements:
- (i) The emergency storage tank is not used as an active storage tank;
- (ii) The owner or operator empties the emergency storage tank no later than 15 days after receiving fluids; and
- (iii) The emergency storage tank is equipped with a liquid level gauge or equivalent device.
- (c) *VOC emission control requirements*. For each storage tank, you must comply with the VOC emissions control requirements of paragraphs (1) or (2) of this section.

- \*\*\* Draft document prepared for 9/5/19 intergovernmental technical discussion between the Ute Tribe Air Quality Program Director and EPA Region 8\*\*\*
- (1) You must reduce VOC emissions from each storage tank by at least 95.0 percent on a continuous basis according to paragraphs (c)(1)(i) or (ii) of this section. You must route all flashing, working, standing and breathing losses from the crude oil, condensate, and/or produced water storage tanks through a closed-vent system that meets the conditions specified in § 49.4177(d) to:
- (i) An operating system designed to recover 100 percent of the emissions and recycle them for use in a process unit or incorporate them into a product; or
- (ii) An enclosed combustor or utility flare designed to reduce the mass content of VOC in the natural gas emissions vented to the device by at least 95.0 percent and operated as specified in §§ 49.4177(d) and 49.4178;
- (2) You must maintain the source-wide uncontrolled actual VOC emissions from all storage tanks, glycol dehydrators, and pneumatic pumps at an oil and natural gas source at less than 4 tpy. Before using the uncontrolled actual VOC emission rate for compliance purposes, you must demonstrate that the uncontrolled actual VOC emissions have remained at less than 4 tpy, as determined monthly for 12 consecutive months. After such demonstration, you must determine the uncontrolled actual VOC emission rate each month. The uncontrolled actual VOC emissions must be calculated using a generally accepted model or calculation methodology. Monthly calculations must be based on the average throughput of the source for the month. Monthly calculations must be separated by at least 14 days. You must comply with paragraph (c)(1) of this section within 30 days of the monthly emissions determination required in this section if the determination

indicates that VOC emissions from all storage tanks, glycol dehydrators, and pneumatic pumps at your oil and natural gas source increased to 4 tpy or greater.

- (3) Except as provided in paragraph (c)(4) of this section, if you use a control device to reduce emissions from your storage tanks, you must equip each storage tank with a cover that meets the requirements of § 49.4177(c).
- (4) If you use a floating roof to reduce emissions, you must meet the requirements of §60.112b(a)(1) or (2) and the relevant monitoring, inspection, recordkeeping, and reporting requirements in 40 CFR part 60, subpart Kb.
- (5) After a minimum of 12 consecutive months of operation at a source that begins operation on or after [30 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], controls may be removed under one of the following conditions:
- (i) The source-wide uncontrolled actual VOC emissions from all storage tanks, glycol dehydrators, and pneumatic pumps has been maintained at a rate less than 4 tpy, as determined according to this section; or
- (ii) At a source with one or more storage tanks and no glycol dehydrators or pneumatic pumps, the source-wide throughput is less than 8,000 barrels of crude oil or 2,000 barrels of condensate.

#### § 49.4175 VOC emissions control requirements for dehydrators.

(a) Applicability. The VOC emissions control requirements of this section apply to each glycol dehydration unit located at an oil and natural gas source as identified in §

- \*\*\* Draft document prepared for 9/5/19 intergovernmental technical discussion between the Ute Tribe Air Quality Program Director and EPA Region 8\*\*\*
- 49.4169(b) where the source-wide uncontrolled actual VOC emissions from all storage tanks, glycol dehydrators, and pneumatic pumps is equal to or greater than 4 tpy, as determined according to § 49.4174. Applicability for glycol dehydrators that began operation before [30 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER] shall be determined using uncontrolled actual emissions. Applicability for glycol dehydrators that began operation on or after [30 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER] shall be determined using potential to emit.
- (b) *Exemptions*. This section does not apply to glycol dehydration units subject to with the emissions control requirements for glycol dehydration unit process vents in 40 CFR, part 63, subpart HH.
- (c) VOC *emissions control requirements*. For each glycol dehydration unit, you must comply with the VOC emissions control requirements of paragraphs (1) or (2) of this paragraph.
- (1) You must reduce VOC emissions from each glycol dehydration unit process vent by at least 95.0 percent on a continuous basis according to paragraphs (c)(1)(i) and (ii) of this section. You must route all glycol dehydration unit process vent emissions through a closed-vent system that meets the conditions specified in § 49.4177(d) to:
- (i) An operating system designed to recover 100 percent of the emissions and recycle them for use in a process unit or incorporate them into a product; or

- \*\*\* Draft document prepared for 9/5/19 intergovernmental technical discussion between the Ute Tribe Air Quality Program Director and EPA Region 8\*\*\*
- (ii) An enclosed combustor or utility flare designed to reduce the mass content of VOC in the emissions vented to the device by at least 95.0 percent and operated as specified in §§ 49.4177(d) and 49.4178; or
- (2) You must maintain the source-wide uncontrolled actual VOC emissions from all storage tanks, glycol dehydrators, and pneumatic pumps at an oil and natural gas source at less than 4 tpy for 12 consecutive months in accordance with the procedures specified in § 49.4174(c)(2).

#### § 49.4176 VOC emissions control requirements for pneumatic pumps.

- (a) *Applicability*. The requirements of this section apply to each pneumatic pump located at an oil and natural gas source as identified in § 49.4169(b) where the potential for source-wide uncontrolled VOC emissions from all storage tanks, glycol dehydrators, and pneumatic pumps is equal to or greater than 4 tpy, as determined according to § 49.4174. You must reevaluate the source-wide VOC emissions from all storage tanks, glycol dehydrators and pneumatic pumps for each modification to an existing source.
- (b) *Exemptions*. This section does not apply to pneumatic pumps subject to the emissions control requirements for pneumatic pumps in 40 CFR part 60, subpart OOOOa.
- (c) *VOC Emission Control Requirements*. For each pneumatic pump, you must comply with the VOC emissions control requirements of paragraph (1) or (2) of this section.
- (1) You must reduce VOC emissions from each pneumatic pump by at least 95.0 percent on a continuous basis according to paragraph (c)(1)(i) or (ii) of this section. You must

- \*\*\* Draft document prepared for 9/5/19 intergovernmental technical discussion between the Ute Tribe Air Quality Program Director and EPA Region 8\*\*\*
- route all pneumatic pump emissions through a closed-vent system that meets the conditions specified in § 49.4177(d) to:
- (i) An operating system designed to recover 100 percent of the emissions and recycle them for use in a process unit or incorporate them into a product; or
- (ii) An enclosed combustor or utility flare designed to reduce the mass content of VOC in the emissions vented to the device by at least 95.0 percent and operated as specified in §§ 49.4177(d) and 49.4178; or
- (2) You must maintain the source-wide uncontrolled actual VOC emissions from all storage tanks, glycol dehydrators, and pneumatic pumps at an oil and natural gas source at less than 4 tpy for any 12 consecutive months in accordance with the procedures specified in § 49.4174(c)(2).

## § 49.4177 VOC emissions control requirements for covers and closed-vent systems.

- (a) *Applicability*. The VOC emissions control requirements in this section apply to each cover on a crude oil, condensate or produced water storage tank subject to § 49.4174 and each closed-vent system used to convey VOC emissions from storage tanks, glycol dehydration units and pneumatic pumps (to a vapor recovery system or control device) that are subject to §§ 49.4174 through 49.4176.
- (b) *Exemptions*. This section does not apply to covers and closed-vent systems subject to the requirements for covers and closed-vent systems in 40 CFR part 60, subparts OOOO or OOOOa, or 40 CFR part 63, subpart HH.

- \*\*\* Draft document prepared for 9/5/19 intergovernmental technical discussion between the Ute Tribe Air Quality Program Director and EPA Region 8\*\*\*
- (c) *Covers*. Each owner or operator must equip all openings on each crude oil, condensate, and/or produced water storage tank with a cover to ensure that all flashing, working, standing and breathing emissions are routed through a closed-vent system to a vapor recovery system, an enclosed combustor, or a utility flare.
- (1) Each cover and all openings on the cover (e.g., access hatches, sampling ports, pressure relief valves (PRV), and gauge wells) must form a continuous impermeable barrier over the entire surface area of the crude oil, condensate, and/or produced water in the storage tank.
- (2) Each cover opening must be secured in a closed, sealed position (e.g., covered by a gasketed lid or cap) whenever material is in the unit on which the cover is installed except when it is necessary to use an opening as follows:
- (i) To add fluids to, or remove fluids from the unit (this includes openings necessary to equalize or balance the internal pressure of the unit following changes in the level of the material in the unit);
- (ii) To inspect or sample the fluids in the unit; or
- (iii) To inspect, maintain, repair, or replace equipment located inside the unit.
- (3) Each thief hatch cover must be weighted and properly seated to ensure that flashing, working, standing and breathing emissions are routed through the closed-vent system to the vapor recovery system, the enclosed combustor, or the utility flare under normal operating conditions.
- (4) Each PRV must be set to release at a pressure that will ensure that flashing, working,

standing and breathing emissions are routed through the closed-vent system to the vapor recovery system, the enclosed combustor, or the utility flare under normal operating conditions.

- (d) *Closed-vent systems*. Each owner or operator must meet the following requirements for closed-vent systems:
- (1) Each closed-vent system must route all captured storage tank flashing, working, standing and breathing losses, glycol dehydration unit process vent emissions, and pneumatic pump emissions from the oil and natural gas source to a gathering pipeline system for sale, use in a process unit, incorporation into a product, or other beneficial purpose, or to a VOC emission control device, as specified in §§ 49.4174 through 49.4176.
- (2) All vent lines, connections, fittings, valves, relief valves, or any other appurtenance employed to contain and collect captured storage tank flashing, working, standing and breathing losses, glycol dehydration unit process vent emissions, and pneumatic pump emissions to transport such emissions to a gathering pipeline system for sale, use in a process unit, incorporation into a product, or other beneficial purpose, or to a VOC emission control device, as specified in §§ 49.4174 through 49.4176, must be maintained and operated properly at all times.
- (3) Each closed-vent system must be designed to operate with no detectable emissions, as demonstrated by the fugitive emissions component monitoring requirements in § 49.4179(c).

- \*\*\* Draft document prepared for 9/5/19 intergovernmental technical discussion between the Ute Tribe Air Quality Program Director and EPA Region 8\*\*\*
- (4) If any closed-vent system contains one or more bypass devices that could be used to divert all or a portion of the captured storage tank flashing, working, standing and breathing losses, glycol dehydration unit process vent emissions, and pneumatic pump emissions, from entering a gathering pipeline system for sale, use in a process unit, incorporation into a product, or other beneficial purpose, or from being transferred to the VOC emissions control device, the owner or operator must meet one of the requirements in paragraphs (i) or (ii) for each bypass device. Low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and safety devices are not subject to the requirements applicable to bypass devices:
- (i) At the inlet to such a bypass device the owner or operator must properly install, calibrate, maintain, and operate a flow indicator that is capable of taking continuous readings and sounding an alarm when the bypass device is open such that emissions are being, or could be, diverted away from a gathering pipeline system for sale, use in a process unit, incorporation into a product, or other beneficial purpose, or the VOC emission control device and into the atmosphere; or
- (ii) The owner or operator must secure the bypass device valve installed at the inlet to the bypass device in the non-diverting position using a car-seal or a lock-and-key type configuration.

## § 49.4178 VOC emissions control devices.

(a) Applicability. The requirements in this section apply to all utility flares and enclosed combustors used to control VOC emissions at an oil and natural gas source as identified

- \*\*\* Draft document prepared for 9/5/19 intergovernmental technical discussion between the Ute Tribe Air Quality Program Director and EPA Region 8\*\*\*
- in § 49.4169(b) in order to meet the requirements specified in §§ 49.4174 through 49.4177, as applicable.
- (b) *Exemptions*. This section does not apply to VOC emission control devices subject to the requirements for control devices used to comply with the emissions standards in 40 CFR part 60, subparts OOOO or OOOOa; or 40 CFR part 63, subpart HH.
- (c) Enclosed combustors and utility flares. Each owner or operator must meet the following requirements for enclosed combustors and utility flares:
- (1) For each enclosed combustor or utility flare, the owner or operator must follow the manufacturer's written operating instructions, procedures and maintenance schedule to ensure good air pollution control practices for minimizing emissions;
- (2) The owner or operator must ensure that each enclosed combustor or utility flare is designed to have sufficient capacity to reduce the mass content of VOC in the captured emissions routed to it by at least 95.0 percent for the minimum and maximum natural gas volumetric flow rate and BTU content routed to the device;
- (3) Each enclosed combustor or utility flare must be operated to reduce the mass content of VOC in the captured emissions routed to it by continuously meeting\_at least 95.0 percent VOC control efficiency;
- (4) The owner or operator must ensure that each utility flare is designed and operated in accordance with the requirements of 40 CFR 60.18(b) for such flares;
- (5) The owner or operator must ensure that each enclosed combustor is:
- (i) A model demonstrated by a manufacturer to meet the VOC control efficiency

requirements of §§ 49.4174 through 49.4177 using the EPA-approved performance test procedures specified in 40 CFR 60.5413 by the due date of the first annual report as specified in § 49.4185(b); and

- (ii) Demonstrated by the owner or operator to meet the VOC control efficiency requirements of §§ 49.4174 through 49.4177 using the EPA-approved performance test procedures specified in 40 CFR 60.5413 by the due date of the first annual report as specified in § 49.4183(b); and
- (6) The owner or operator must ensure that each enclosed combustor and utility flare is:
- (i) Operated properly at all times that captured emissions are routed to it;
- (ii) Operated with a liquid knock-out system to collect any condensable vapors (to prevent liquids from going through the control device);
- (iii) Equipped and operated with a flash-back flame arrestor;
- (iv) Equipped and operated with one of the following:
- (A) A continuous burning pilot; or
- (B) An operational electronically controlled automatic ignition device;
- (v) Equipped with a monitoring system for continuous measuring and recording of the parameters that indicate proper operation of each continuous burning pilot flame or electronically controlled automatic ignition device (such as a chart recorder, data logger or similar device), or connected to a SCADA system, to monitor and document proper operation of the enclosed combustor or utility flare;
- (vi) Maintained in a leak-free condition; and

- \*\*\* Draft document prepared for 9/5/19 intergovernmental technical discussion between the Ute Tribe Air Quality Program Director and EPA Region 8\*\*\*
- (vii) Operated with no visible smoke emissions.

#### § 49.4179 Fugitive emissions VOC emissions control requirements.

- (a) *Applicability*. The requirements of this section apply to all owners or operators of the collection of fugitive emissions components, as defined in § 49.4171, at an oil and natural gas source, as identified in § 49.4169(b), that is required to control VOC emissions according to §§ 49.4174 through 49.4178.
- (b) *Exemptions*. This section does not apply to owners or operators of the collection of fugitive emission components, as defined in 40 CFR 60.5430a, at an oil and natural gas source subject to the fugitive emissions monitoring requirements in 40 CFR part 60, subpart OOOOa.
- (c) Monitoring requirements. (1) Each owner or operator must develop and implement a fugitive emissions monitoring plan to reduce emissions from fugitive emissions components at all of their oil and natural gas sources on Indian country lands within the U&O Reservation. This Reservation-wide monitoring plan must include the following elements:
- (i) A requirement to perform an initial monitoring of the collection of fugitive emissions components at each oil and natural gas source by [DATE 18 MONTHS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER];
- (ii) A requirement to perform subsequent monitoring of the collection of fugitive emissions components at each oil and natural gas source once every 6 months after the initial monitoring survey, with consecutive monitoring surveys conducted at least five

- \*\*\* Draft document prepared for 9/5/19 intergovernmental technical discussion between the Ute Tribe Air Quality Program Director and EPA Region 8\*\*\*
- months apart.
- (iii) A description of the technique used to identify leaking fugitive emission components, which must be limited to:
- (A) Onsite EPA Reference Method 21, 40 CFR part 60, appendix A, where an analyzer reading of 500 parts per million volume (ppmv) VOC or greater is considered a leak in need of repair;
- (B) Onsite optical gas imaging instruments, as defined in 40 CFR 60.18(g)(4), where any visible emissions are considered a leak in need of repair, unless the owner or operator evaluates the leak with an analyzer meeting EPA Reference Method 21 at 40 CFR part 60, appendix A and the concentration is less than 500 ppmv. The optical gas imaging instrument must be capable of meeting the optical gas imaging equipment requirements specified in 40 CFR part 60, subpart OOOOa; or
- (C) Another method approved by the Administrator other than EPA Reference Method 21 or optical gas imaging instruments to demonstrate compliance with the fugitive emissions monitoring requirements.
- (iv) The manufacturer and model number of any fugitive emissions monitoring device to be used;
- (v) Procedures and timeframes for identifying and repairing components from which leaks are detected, including:
- (A) A requirement to repair any leaks identified from components that are safe to repair and do not require source shutdown as soon as practicable, but no later than 30 calendar

days after discovering the leak;

- (B) Timeframes for repairing leaking components that are unsafe to repair or require source shutdown, to be no later than the next required monitoring event; and
- (C) Procedures for verifying leaking component repairs, no more than 30 calendar days after repairing the leak;
- (vi) Training and experience needed before performing surveys;
- (vii) Procedures for calibration and maintenance of any fugitive emissions monitoring device to be used; and
- (viii) Standard monitoring protocols for each type of typical oil and natural gas source (e.g., well site, tank battery, compressor station), including a general list of component types that will be inspected and what supporting data will be recorded (e.g., wind speed, detection method device-specific operational parameters, date, time, and duration of inspection).
- (2) The owner or operator is exempt from inspecting a valve, flange, or other connection, pump or compressor, pressure relief device, process drain, open-ended valve, pump or compressor seal system degassing vent, accumulator vessel vent, agitator seal, or access door seal under any of the following circumstances:
- (i) The contacting process stream only contains glycol, amine, methanol, or produced water;
- (ii) If using Method 21, the monitoring could not occur without elevating the monitoring personnel to an immediate danger as a consequence of completing monitoring;

- \*\*\* Draft document prepared for 9/5/19 intergovernmental technical discussion between the Ute Tribe Air Quality Program Director and EPA Region 8\*\*\*
- (iii) Monitoring could not occur without exposing monitoring personnel to an immediate danger as a consequence of completing monitoring; or
- (iv) The item to be inspected is buried, insulated in a manner that prevents access to the components by a monitor probe or optical gas imaging device, or obstructed by equipment or piping that prevents access to the components by a monitor probe or optical gas imaging device.

# § 49.4180 Tank truck loading VOC emissions control requirements.

- (a) *Applicability*. The requirements in this section apply to each owner or operator who loads or permits the loading of any intermediate hydrocarbon liquid or produced water at an oil and natural gas source as identified in § 49.4169(b).
- (b) *Tank truck loading requirements*. Tank trucks used for transporting intermediate hydrocarbon liquid or produced water must be loaded using bottom filling or a submerged fill pipe, as defined in § 49.4171(b).

## § 49.4181 VOC emissions control requirements for pneumatic controllers.

- (a) *Applicability*. The VOC emissions control requirements in this section apply to each owner or operator of any existing pneumatic controller located at an oil and natural gas source as identified in § 49.4169(b).
- (b) *Exemptions*. This section does not apply to pneumatic controllers subject to and controlled in accordance with the requirements for pneumatic controllers in 40 CFR part 60, subparts OOOO or OOOOa.
- (c) Retrofit requirements. All existing pneumatic controllers must meet the standards

established for pneumatic controllers that are constructed, modified, or reconstructed on or after October 15, 2013, as specified in 40 CFR part 60, subpart OOOO Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution. (d) *Documentation requirements*. The owner or operator of any existing pneumatic controllers must meet the tagging requirements in 40 CFR 60.5390(b)(2) and (c)(2) and 40 CFR 60.5390a(b)(2) and (c)(2), except that the month and year of installation, reconstruction or modification is not required.

#### § 49.4182 Other combustion devices.

- (a) *Applicability*. The VOC emission control requirements in this section apply to each owner or operator of any existing enclosed combustor, utility flare, or other flare located at an oil and natural gas source as identified in § 49.4169(b) that is used to control VOC emissions, but is not required under §§ 49.4174 through 49.4176, and 49.4178 of this rule.
- (b) *Retrofit requirements*. All existing enclosed combustors, utility flares, or other open flares must be equipped with an operational electronically controlled automatic ignition device.

#### § 49.4183 Monitoring requirements.

(a) *Applicability*. The monitoring requirements in paragraphs (c) through (e) of this section apply, as appropriate, to each oil and natural gas source as identified in § 49.4169(b) with equipment or activities that are subject to §§ 49.4174 through 49.4178.

- \*\*\* Draft document prepared for 9/5/19 intergovernmental technical discussion between the Ute Tribe Air Quality Program Director and EPA Region 8\*\*\*
- (b) *Exemptions*. Paragraphs (c) through (e) do not apply to any crude oil, condensate, or produced water storage tanks, glycol dehydration units, pneumatic pumps, covers, closed-vent systems or VOC emission control devices subject to and monitored in accordance with the monitoring requirements for such equipment and activities in 40 CFR part 60, subparts OOOO or OOOOa, or 40 CFR part 63, subpart HH.
- (c) Each owner or operator must inspect at least once every calendar month each closed-vent system, including storage tank openings, thief hatches, and bypass devices, for defects that can result in air emissions according to the procedures in 40 CFR 60.5416(c). Any defects identified must be corrected or repaired within 15 days of identification.
- (d) Each owner or operator must perform auditory, visual, and olfactory (AVO) inspections at least once every calendar month of each VOC emissions control device, tank thief hatch, cover, seal, pressure relief valve, and closed-vent system to ensure proper condition and functioning of the equipment. The monthly inspections must be performed while the crude oil, condensate, and produced water storage tanks are being filled. If any of the components are not in good working condition, they must be repaired within 15 days of identification of the deficient condition.
- (e) Each owner or operator must monitor the operation of each enclosed combustor and utility flare to confirm proper operation and Demonstrate compliance with the requirements of §49.4178(c)(6)(iv) and (v), as follows:
- (1) Check the system for proper operation whenever an operator is on site, at least once per calendar month; and

- \*\*\* Draft document prepared for 9/5/19 intergovernmental technical discussion between the Ute Tribe Air Quality Program Director and EPA Region 8\*\*\*
- (2) Respond to any indication of pilot flame failure and ensure that the pilot flame is relit as soon as practically and safely possible after discovery.;
- (3) Demonstrate compliance with the requirements of §49.4178(c)(6)(vii), that each enclosed combustor is operated with no visible smoke emissions, by complying with the requirements in 40 CFR 60.5412(d)(i) through (iii).
- (e) Where sufficient to meet the monitoring requirements in this section, the owner or operator may use a SCADA system to monitor and record the required data in paragraphs(c) through (d).

## 49.4184 Recordkeeping requirements.

- (a) Each owner or operator of an oil and natural gas source as identified in § 49.4169(b) must maintain the following records, as applicable:
- (1) For each oil and natural gas source as identified in § 49.4169(b):
- (i) As applicable, the monthly calculations, as specified in § 49.4174(c)(2), demonstrating that the uncontrolled actual VOC emissions from all storage tanks, glycol dehydrators, and pneumatic pumps at an oil and natural gas source, as identified in § 49.4169(b), has been maintained at less than 4 tpy;
- (ii) As applicable, records of monthly and rolling 12-month crude oil or condensate throughput;
- (iii) For each enclosed combustor or utility flare at an oil and natural gas source required under §§ 49.4174 through 49.4178:

- \*\*\* Draft document prepared for 9/5/19 intergovernmental technical discussion between the Ute Tribe Air Quality Program Director and EPA Region 8\*\*\*
- (A) Manufacturer-written, site-specific designs, operating instructions, operating procedures and maintenance schedules, including those of any operation monitoring systems;
- (B) Date of installation;
- (C) Records of all required monitoring of operations in § 49.4183;
- (D) Records of any instances in which the pilot flame is not present or the monitoring equipment is not functioning in the enclosed combustor or utility flare, the date and times of the occurrence, the corrective actions taken, and any preventative measures adopted to prevent recurrence of the occurrence;

and

- (E) Records of any time periods in which visible smoke emissions are observed emanating from the enclosed combustor or utility flare.
- (iv) For each closed-vent system:
- (A) The date of installation; and
- (B) Records of any instances in which any closed-vent system or control device was bypassed or down, the reason for each incident, its duration, and the corrective actions taken and any preventative measures adopted to avoid such bypasses or downtimes; and
- (v) Documentation of all storage tank and closed-vent system inspections required in § 49.4183(d) and (e) All inspection records must include the following information:
- (A) The date of the inspection;
- (B) The findings of the inspection;

- \*\*\* Draft document prepared for 9/5/19 intergovernmental technical discussion between the Ute Tribe Air Quality Program Director and EPA Region 8\*\*\*
- (C) Any adjustments or repairs made as a result of the inspection, and the date of the adjustment or repair; and
- (D) The inspector's name and signature;
- (vi) The Uinta Basin-wide fugitive emissions monitoring plan for the U&O Reservation; and
- (vii) Documentation of each fugitive emissions inspection at all oil and natural gas sources. All inspection records must include the following information:
- (A) The date of the inspection;
- (B) The identification of any component that was determined to be leaking;
- (C) The identification of any component not exempt under § 49.4179(b)(2) that is not inspected and the reason it was not inspected;
- (D) The date of the first attempt to repair the leaking component;
- (E) The identification of any component with a delayed repair and the reason for the delayed repair:
- (1) For unavailable parts:
- (i) The date of ordering a replacement component; and
- (ii) The date the replacement component was received; and
- (2) For a shutdown:
- (i) The reason the repair is technically infeasible;
- (ii) The date of the shutdown;
- (iii) The date of subsequent startup after a shutdown; and

- \*\*\* Draft document prepared for 9/5/19 intergovernmental technical discussion between the Ute Tribe Air Quality Program Director and EPA Region 8\*\*\*
- (iv) Emission estimates of the shutdown and the repair if the delay is longer than 6 months;
- (F) The date and description of any corrective action taken, including the date the component was verified to no longer be leaking;
- (G) The identification of each component exempt under § 49.4179(b)(2), including the type of component and a description of the qualifying exemption; and
- (H) The inspector's name and signature.
- (2) For each oil and natural gas source as identified in § 49.4169(b):
- (i) For each electronically controlled automatic ignition system required under § 49.4182, records demonstrating the date of installation and manufacturer specifications; and
- (ii) For each retrofitted pneumatic controller, the records required in 40 CFR 60.5420(c)(4)(i).
- (b) Each owner or operator must keep all records required by this section onsite at the source or at the location that has day-to-day operational control over the source and must make the records available to the EPA upon request.
- (c) Each owner or operator must retain all records required by this section for a period of at least five years from the date the record was created.

#### § 49.4185 Notification and reporting requirements.

(a) Each owner or operator must submit any documents required under this rule to: U.S. EPA Region 8, Office of Enforcement, Compliance & Environmental

Justice Enforcement and Compliance Assurance Division, Air Toxics and Technical

Enforcement <u>ProgramBranch</u>, 8ENF-AT, 1595 Wynkoop St., Denver, CO 80202, or documents may be submitted electronically to *r8airreportenforcement@epa.gov*.

- (b) Each owner and operator must submit an annual report containing the information specified in paragraphs (b)(1) through (3) of this section. The annual report must cover the period for the previous calendar year. The initial annual report is due within fifteen months of [DATE 30 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]. Subsequent annual reports are due on the same date each year as the date the initial annual report was submitted. If you own or operate more than one oil and natural gas source, you may submit one report for multiple oil and natural gas sources provided the report contains all of the information required as specified in paragraphs (b)(1) through (3) of this section. Annual reports may coincide with title V reports as long as all the required elements of the annual report are included. An alternative schedule on which the annual must be submitted will be allowed as long as the schedule does not extend the reporting period. The annual report must include:
- (1) The owner or operator name, and the name and location (decimal degree latitude and longitude location indicating the datum used in parentheses) of each oil and natural gas source being included in the annual report.
- (2) The beginning and ending dates of the reporting period.
- (3) For each oil and natural gas source a summary of all required records specified in § 49.4183 as they relate to the source's compliance with the requirements of §§ 49.4174 through 49.4183.

# §§ 49.4186-49.9860 [Reserved]

3. Reserve §§ 49.4186 through 49.9860.